

## **Wrist Auto-Inflation**








### *Wrist Blood Pressure Monitor*



## IMPORTANT INFORMATION



Please read this important information before using your monitor.

-  Please remember that only a medical practitioner is qualified to interpret your blood pressure measurements. Use of this device should not replace regular medical examinations.
-  Have your physician review your procedure for using this device. He or she will want to verify blood pressure measurements before prescribing or adjusting medications.
-  Consult your physician if you have any doubt about your readings. Should a mechanical problem occur, contact A&D Medical.
-  Do not attempt to service, calibrate, or repair this device.
-  Because your UB-511 monitor contains delicate, high-precision parts, avoid exposing it to extremes in temperature or humidity or to direct sunlight, shock and dust. A&D Medical guarantees the accuracy of this device only when it is stored and used within the temperature and humidity ranges noted on page E-15.
-  Clean the monitor and cuff with a dry, soft cloth or a cloth dampened with water and a mild detergent. Never use alcohol, benzene, thinner or other harsh chemicals to clean monitor or cuff.
-  Remove and replace batteries if monitor is not used for more than six months.

## PRECAUTIONS FOR USE

The UB-511 is designed to be used at home, by those who are 18 years and older to monitor blood pressure: systolic and diastolic, and pulse rate.

Congratulations. You have purchased a **LifeSource** state-of-the-art blood pressure monitor, one of the most technologically advanced yet easy to use products available in the marketplace today. This **LifeSource** monitor is designed to make your daily regimen useful and convenient.

Physicians agree that daily self-monitoring of blood pressure is an important way individuals can contribute to maintaining their cardiovascular health and preventing the serious consequences of hypertension left undiagnosed and untreated.

A&D Medical has been manufacturing quality healthcare products for more than 20 years. Rest assured that we are committed to providing you and your family with monitoring devices specifically designed for high accuracy and ease of use.



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## WHAT DISPLAY SYMBOLS MEAN

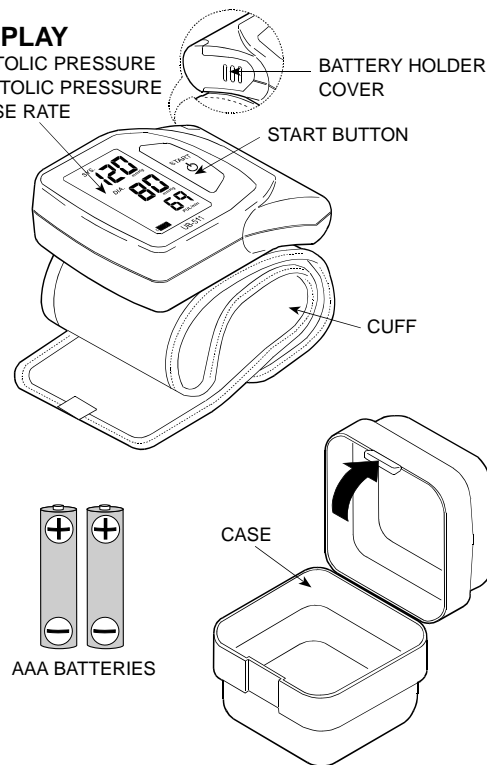
Display Symbol	Condition/Error	Recommended Action
	Appears when measuring is in progress, and flashes when pulse is detected.	Remain still and refrain from talking during monitoring process.
 IRREGULAR HEARTBEAT	An irregular heartbeat or body movement may have occurred. Refer to page E-7 for more information on irregular heartbeats.	Take measurement again and consult with your physician.
 FULL BATTERY	The monitor is using sufficiently charged batteries.	
 LOW BATTERY	The batteries are low when the indicator blinks.	Replace batteries with two new batteries when the indicator blinks.
	The systolic and diastolic measurements are within 10 mmHg of each other.	Fasten the cuff correctly, try the measurement again.
	Unstable blood pressure due to excessive body movement.	Try the measurement again. Remain very still during the measurement.
	The pressure value did not increase during inflation.	Check cuff to ensure fit and fastening is correct, and measure again.
	The cuff is not fastened correctly.	Check cuff to ensure fit and fastening is correct, and measure again.
 PULSE DISPLAY ERROR	The pulse is not detected correctly.	Check for correct fit and position of cuff and take another reading.
	Indicates previous measurement stored in memory.	
	Pressure Indicator	Measurement is in progress, remain as still as possible.

## MONITOR COMPONENTS



### DISPLAY

SYSTOLIC PRESSURE  
DIASTOLIC PRESSURE  
PULSE RATE





## HOW UB-511 WORKS

*LifeSource™* Blood Pressure Monitors are easy to use, accurate and display clear digital measurements. Our technology is based on the “oscillometric method”. The term “oscillation” refers to the measure of vibrations caused by the arterial pulse and is a non-invasive method to determine blood pressure.

Our monitors examine the pulsatile pressure generated by the arterial wall as it expands and contracts with each heartbeat against the monitor's cuff. This monitor measures your blood pressure while the cuff is inflating.

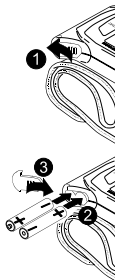


## BEFORE YOU START

The UB-511 provides accurate readings on wrists with a circumference between 5.3" and 8.5" (13.5 cm and 21.5 cm).

The unit requires two “AAA” (1.5 volt) batteries to operate. To install batteries (or to replace when “Low Battery” symbol appears), proceed as follows:

1. Slide the battery cover as shown to remove from the device.
2. Insert batteries into designated areas ensuring a correct match with positive (+) and negative (-) terminals.
3. Return battery cover by sliding back on to monitoring device.



## TAKING YOUR BLOOD PRESSURE

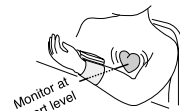
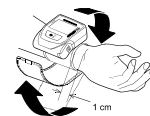


### Tips for Blood Pressure Monitoring:

- ☞ Relax for 5 to 10 minutes prior to measurement
- ☞ Remove watch, jewelry or tight-fitting garments
- ☞ Use left wrist unless otherwise recommended by physician

Now you are ready to follow these simple steps:

1. Sit comfortably in a chair near a flat surface.
2. With palm facing upward, attach monitor to left wrist and fasten securely. The top edge of the cuff should align with the crease of your wrist.
3. Position your wrist so it is level with your heart, using an arm rest if needed. Positioning of the wrist at heart level is critical for accurate measurement.
4. Press the START button. The average readings from blood pressure measurements stored in memory will appear for a few seconds and the number of measurements stored in memory will flash two times (e.g. A04). The cuff will then begin to inflate. It is normal for the cuff to feel very tight.



**NOTE: To stop inflation at any time, press START**

5. Remain still and refrain from talking or moving during reading.





## TAKING YOUR BLOOD PRESSURE

- As the cuff is inflating, the ♥ (heart symbol) will appear to indicate that the measurement is in progress. The monitor measures your blood pressure while the cuff is inflating, so remain still. Once the pulse is detected, the symbol will flash with each pulse beat.
- When measurement is complete, the SYSTOLIC, DIASTOLIC, and PULSE readings are displayed. The cuff will automatically deflate completely, expelling all remaining air.
- Press START button once to turn off power. The device has an automatic power-down feature which turns off power automatically one minute after measurement is obtained.



For the most useful blood pressure history, we recommend that you record the date and time after each measurement. The most accurate history relies not on a single or sporadic readings, but on a consistent monitoring pattern over time.

**NOTE: If you wish to take your blood pressure measurement again, relax and wait 5-10 minutes to enable the flow of blood in the arm to return to normal.**

**NOTE: If you have poor blood circulation in winter (especially when your hands and wrists are cold), you may not get a blood pressure measurement.**

## WHAT IS AN IRREGULAR HEARTBEAT?



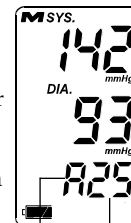
The UB-511 Blood Pressure Monitor provides a blood pressure and pulse rate measurement even when an irregular heartbeat occurs. An irregular heartbeat is defined as a heartbeat that varies by 25% from the average of all heartbeat intervals during the blood pressure measurement. It is important that you relax, remain still and refrain from talking during measurements. If an irregular heartbeat occurs during a reading, this symbol will appear (♥).

**NOTE: We recommend contacting your physician if you see this (♥) symbol frequently.**

## ABOUT AVERAGE READING



The UB-511 provides an average blood pressure reading based on the total measurements stored in memory. When taking a measurement, the average blood pressure reading will appear and the number of measurements stored in memory will flash two times before the cuff begins to inflate. The average blood pressure reading will also appear briefly when you recall the measurements stored in memory.



AVERAGE  
NUMBER OF MEASUREMENTS  
STORED IN MEMORY



## ABOUT MEMORY

The UB-511 automatically stores up to 30 blood pressure and pulse measurements in its memory. Measurements stored in memory are assigned an index number in the order of the newest to the oldest. The oldest reading displays as "n01".

To retrieve readings, follow these simple steps:

1. When the display screen is blank, press and hold the START button. While holding down the START button, you will see the average reading displayed first. You will then see the memory index number (e.g. n03) of the most recent reading followed by the measurement. Release the START button when you see the memory index number.
2. The display will shut off automatically a few seconds after all of the readings are displayed. To turn off the monitor at any time, press the START button.
3. The display will shut off automatically a few seconds after the readings are displayed.

To clear the measurement history from memory, remove the batteries from the unit and then place the batteries back into the battery holder.

**NOTE:** If there are no measurements stored in memory, you will see two 0s displayed vertically followed by a blinking "A00".

**NOTE:** Stored measurements will be lost if batteries become low or are removed.

## ABOUT PRESSURE INDICATOR



The Pressure Indicator is located on the left side of the display screen to tell you when the blood monitor is inflating the cuff. The indicator consists of a scale with six levels and moves up during inflation.

**Inflation in Progress**



**Inflation/Measurement Complete**



**Measurement Displayed**



**NOTE:** The motor will inflate the cuff at a slow speed starting at 20mmHg to begin the blood pressure measurement process.



## ABOUT BLOOD PRESSURE

### ■ What Is Blood Pressure?

Blood pressure is the force exerted by blood against the walls of the arteries. Systolic pressure occurs when the heart contracts; diastolic pressure occurs when the heart expands. Blood pressure is measured in millimeters of mercury (mmHg).

### ■ What Affects Blood Pressure?

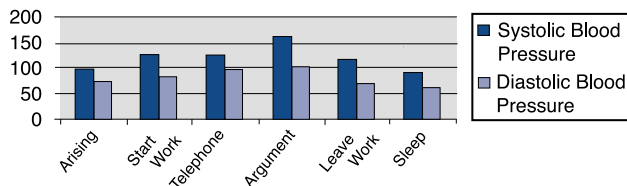
Blood pressure is affected by many factors: age, weight, time of day, activity level, climate, altitude and season. Certain activities can significantly alter blood pressure. Walking can raise systolic pressure by 12 mmHg and diastolic pressure by 5.5 mmHg. Sleeping can decrease systolic blood pressure by as much as 10 mmHg. Taking your blood pressure repeatedly without waiting an interval of 5 to 10 minutes between readings, or without raising your arm to allow blood to flow back to the heart, can also affect it.

In addition to these factors, beverages containing caffeine or alcohol, certain medications, emotional stress and even tight-fitting clothes can make a difference in the readings.

### ■ What Causes Variations In Blood Pressure?

An individual's blood pressure varies greatly from day to day and season to season. In hypersensitive individuals, these variations are even more pronounced. Normally, blood pressure rises during work or play and falls to its lowest levels during sleep.

#### Fluctuation within a day (case: 35 year old male)



## ABOUT BLOOD PRESSURE



### ■ Assessing High Blood Pressure

The following standards for assessing high blood pressure (without regard to age) have been established as a guideline.

BP Classification	Systolic (mmHg)	Diastolic (mmHg)
Normal	<120	and <80
Prehypertension	120-139	or 80-89
Stage 1 Hypertension	140-159	or 90-99
Stage 2 Hypertension	≥160	or ≥100

**SOURCE: The Seventh Report of the Joint National Committee on Prevention, Evaluation and Treatment of High Blood Pressure. National Heart, Lung and Blood Institute - May 2003.**

### ■ What Is Hypertension?

Hypertension (high blood pressure) is the diagnosis given when readings consistently rise above normal. It is well known that hypertension can lead to stroke, heart attack or other illness if left untreated. Referred to as a "silent killer" because it does not always produce symptoms that alert you to the problem, hypertension is treatable when diagnosed early. Those who fall within the Prehypertensive range are more likely to develop hypertension in the future.

### ■ Can Hypertension Be Controlled?

In many individuals, hypertension can be controlled by altering lifestyle and minimizing stress, and by appropriate medication prescribed and monitored by your doctor. The American Heart Association recommends the following lifestyle suggestions to prevent or control hypertension:

- **Don't smoke.**
- **Reduce salt and fat intake.**
- **Maintain proper weight.**
- **Exercise routinely.**
- **Have regular physical checkups.**
- **Monitor your blood pressure at periodic intervals.**



## ■ Why Measure Blood Pressure at Home?

It is now well known that, for many individuals, blood pressure readings taken in a doctor's office or hospital setting might be elevated as a result of apprehension and anxiety. This response is commonly called "white coat hypertension." One way to determine whether this is the case for you is to take your home monitor to the doctor's office and, before the doctor or nurse takes your pressure, do it yourself on your home monitor and compare it to your record of home readings.

In any case, self-measurement at home supplements your doctor's readings and provides a more accurate, complete blood pressure history. In addition, clinical studies have shown that the detection and treatment of hypertension is improved when patients both consult their physicians and monitor their own blood pressure at home.

## ■ Keys to Successful Monitoring:

Blood pressure fluctuates throughout the day. We recommend that you are consistent in your daily measurement routine:

- Measure at the same time every day.
- Sit in the same chair/position.
- Relax for 5 minutes before measurement.
- Sit still during measurement – no talking, eating or sudden movements.
- Record your measurement in a logbook.

## ■ How Do I Record My Blood Pressure?

Blood pressure readings are typically recorded with the systolic pressure written first, followed by a slash mark and the diastolic pressure. For example, 120 mmHg systolic and 80 mmHg diastolic measurements are written as 120/80. Pulse is simply written with the letter “P” followed by the pulse rate—P 72, for example.

Please see Page E-13 for the blood pressure record, or visit [www.LifeSourceOnline.com](http://www.LifeSourceOnline.com) for the BP tracking diary

**LifeSource**<sup>TM</sup>  
*Your source for a lifetime of health*

## BLOOD PRESSURE RECORD

Name :

Age :

Weight :

[illegible]



## TROUBLESHOOTING

Problem	Probable cause	Corrective action
Display is blank, even when the power is turned on.	Batteries are drained.	Replace with new batteries.
	Battery terminals are not in the correct position.	Place the battery with negative and positive terminals matching those indicated in the battery compartment.
The device will not measure. Readings are too high or too low.	The cuff is not fastened properly.	Fasten the cuff correctly.
	You moved your arm or body during the measurement.	Make sure you remain very still and quiet during the measurement.
	The position of your wrist is not correct.	Position your wrist so it is level with your heart, using an arm rest if needed.
Other	The blood pressure reading is different from that measured at a clinic or doctor's office.	See Pg E-12 "Why Measure Blood Pressure at Home?"
		Remove the batteries. Place back in correctly, and try the measurement again.

**NOTE:** If the actions described above do not solve the problem, contact A&D Medical or Auto Control Medical at the numbers listed at the bottom of these pages. Do not attempt to repair the device yourself.

## SPECIFICATIONS



<b>Model</b>	UB-511
<b>Type</b>	Oscillometric
<b>Display</b>	Digital, 10/7-mm character height, Pressure/Pulse displayed simultaneously
<b>Memory</b>	30 readings
<b>Measurement range</b>	Pressure: 20 mmHg to 280 mmHg Pulse: 40 pulses to 199 pulses/minute
<b>Accuracy</b>	Pressure: $\pm 3$ mmHg or 2%, whichever is greater, Pulse: $\pm 5\%$
<b>Pressurization</b>	Automatic, using micropump
<b>Depressurization</b>	Constant air release-valve system
<b>Power source</b>	2 type AAA (1.5 volt) alkaline batteries (included)
<b>Battery life</b>	Approximately 400 measurements
<b>Operating environment</b>	50°F to 104°F (10°C to 40°C) Less than 95% relative humidity
<b>Storage environment</b>	14°F to 140°F (-10°C to 60°C) Less than 95% relative humidity
<b>Wrist Circumference Range</b>	5.3 – 8.5" (13.5 – 21.5 cm),
<b>Dimensions</b>	Depth: 0.8" (21 mm), Width: 2.5" (63 mm), Height: 2.2" (56 mm),
<b>Dimensions with case</b>	Length: 4.0" (102 mm), Width: 3.0" (76 mm), Height: 3.3" (83 mm), approximately
<b>Weight</b>	2.9 oz. (82 g) without batteries

**Blood pressure measurements determined by the UB-511 are equivalent to those obtained by a trained observer using the cuff/stethoscope auscultation method within the limits prescribed by the American National Standards Institute for electronic or automated sphygmomanometers.**





## CONTACT INFORMATION

Our products are designed and manufactured using the latest scientific and technological methods, and offer accurate, easy to use, home monitoring and treatment options. The product line includes:

- **Aneroid Blood Pressure Kits**
- **Blood Pressure Cuffs**
- **Digital Blood Pressure Monitors**
- **Digital Thermometers**
- **Heart Rate Monitors**
- **Personal Health Scales**
- **Stethoscopes**
- **Nebulizers**

This **LifeSource** product is covered by a Lifetime Warranty. See warranty card for details.

For more information regarding use, care or servicing of your Blood Pressure Monitor, contact:

A&D Medical  
A division of A&D Engineering, Inc.  
1555 McCandless Drive  
Milpitas, CA 95035  
LifeSource Health Line (Toll-Free): 1-888-726-9966  
[www.LifeSourceOnline.com](http://www.LifeSourceOnline.com)

For Canada Residents, please contact:  
Auto Control Medical  
6695 Millcreek Drive, Unit 5  
Mississauga, Ontario  
L5N 5R8 Canada  
Auto Control (Toll-Free): 1-800-461-0991  
[www.autocontrol.com](http://www.autocontrol.com)

## IMPORTANT!

**If You Need Assistance with the Set-Up or Operation**

## We Can Help!

**Please call us FIRST before contacting your retailer at**

**LifeSource Health Line**

**1-888-726-9966 - Toll Free**

**1-800-461-0991 - In Canada**

**A specially trained representative will assist you**



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I-MAN:511 Printed in China 11/04

